

### **Education**

GPA: 3.76/4.00

Bachelor of Science in Statistics and Machine Learning with University Honors

#### Relevant Courses

Intro to Machine Learning (PhD), Probabilistic Graphical Models (PhD), Causal Inference (PhD), Algorithms and Advanced Data Structures

## Work Experience

Graduate Computational Immunology Intern at Regeneron . . . . . . . . June 2020 – August 2020

• Sold the real estate startup an interactive app that would predict how much property rentals across Pittsburgh would rent for and how quickly they would rent.

Quantitative Trading Intern at Virtu Financial . . . . . . . . . . . . . June 2019 – August 2019

• Worked on the algorithms team at the high frequency trading firm to predict profitable ETF price deviations from the NAV and alter trading strategies based on these price shifts.

# **Projects & Activities**

TA for 10-701 Intro Machine Learning (PhD) . . . . . . . . . . . . . . January 2020 – May 2020

• Led recitations, wrote homework problems, held office hours, and advised final projects.

Computational Biology Researcher with Professor Jian Ma . . . . . . . . . May 2019 – May 2020

• Developed methods for learning the structure of a multiDAG network embedded within a hidden Markov model where each hidden state in the HMM corresponded to a possible cell lineage.

Carnegie Mellon Racing System Lead for Car Pedals . . . . . . . . . September 2017 – January 2019

- Designed the car's pedals in Solidworks and simulated forces applied to the pedals with FEA.
- Placed 1st in the 2018 Formula SAE Electric Vehicle Competition.

• Trained a neural network on grandmaster chess games to replicate Stockfish's scoring algorithm. The AI parsed possible moves with minimax search and then evaluated moves using the neural network.

- Built prototype that used silicon photomultiplier arrays paired with organic scintillators to determine the trajectory of cosmic ray muons, reducing the costs of muon tomography.
- Placed 3rd in Physics and Astronomy at Intel International Science and Engineering Fair.

### Skills & Interests

Skills: Python, C, R, SQL, Tableau, Javascript, HTML/CSS, Matlab, CAD, Unity, Microsoft Excel Interests: Data Science, Artificial Intelligence, Bioinformatics, Computer Vision, Causal Inference